DOCUMENT RESUME

ED 450 855 JC 010 239

AUTHOR Townsend, Barbara K.; Ignash, Jan
TITLE Assumptions about Transfer Behavior in State-Level Articulation Agreements: Realistic or Reactionary?
PUB DATE 2000-11-00
NOTE 15p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (Sacramento, CA, November 17-20, 2000).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Articulation (Education); *College Transfer Students; *Community Colleges; Educational Policy; *Educational Research; Higher Education; *Institutional Cooperation; *Transfer Policy; Transfer Programs

ABSTRACT

This paper discusses state-level articulation agreements and the transfer behavior of college students. Several studies are described, most notably Kintzer and Wattenbarger's (1985) finding that, in the mid-1980s, eight states had formal and legally based policies and 22 additional states had state system policies. The authors assert that, given the likelihood that the majority of today's college students will transfer at least once during their college education, it is imperative that states have articulation agreements that facilitate this transfer. The authors' study, also discussed in this paper, sought to update Kintzer and Wattenbarger's research. In spring 1999, a two-page survey was sent to the executive directors of state higher education and community college agencies, asking about the existence of articulation agreements. Findings included: (1) respondents for 34 of the 43 states in the study indicated that their state had developed a formal, statewide articulation agreement; (2) 27 of these states had developed or amended their agreements since the Kintzer and Wattenbarger study; (3) the traditional view of transfer as an upwardly vertical movement from the two-year to the four-year college dominated the agreements; and (4) 70% of the states had designated one or more associate degrees as a degree that would automatically transfer to all four-year public institutions within the states. (EMH)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 450 855

Assumptions about Transfer Behavior in State-Level Articulation Agreements: Realistic or Reactionary?[1]

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Barbara K. Townsend
University of Missouri-Columbia
townsendb@missouri.edu

Jan Ignash
University of South Florida
Ignash@tempest.coedu.usf.edu

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
B. Townsend
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Traditional views of four-year college student attendance assume that students will graduate from the college at which they first matriculate. For example, the Southern Educational Foundation (1995) has stated, "No student enters a four-year college or university expecting to dropout or leave without graduating" (p. 1). Similarly, traditional views of community college students desiring a baccalaureate is that they will complete their associate's degree at the community college before they transfer to the four-year college from which they wish to graduate (Piland, 1995).

While these assumptions may once have been realistic, they are no longer valid for a significant number of students. McCormick & Carroll (1997), in their examination of NCES data, concluded that more than 25% of students matriculating at a four-year college transfer (as cited in Porter, 2000). Using data from the Beginning Postsecondary Student Longitudinal Study, Berkner, Lorn, and Clune (2000) tracked for three years students who started their higher education in 1995-96. They found that 20% of the students who began at a four-year college transferred within three years (p. iv). Many of these students transferred to two-year colleges in a phenomenon known as "reverse transfer" (Townsend, 1999). Furthermore, 24% of the students who began at a public community college indicated they intended to transfer to a four-year college before completing an associate's degree (p. vi), and 12% of the students who began at a two-year college actually did so (Berkner, Lorn, & Clune, 2000, p. 8).

Not only do students' transfer behaviors contradict traditional views of college attendance patterns, their behaviors also illustrate a high rate of interinstitutional transfer. After examining several national student data bases, Adelman (1999) concluded that by 2000, "we will easily surpass a 60 percent multi-institutional attendance rate (p. vii). He also found that "sixteen percent of postsecondary students (and 18 percent of bachelor's degree completers) engaged in alternating or simultaneous enrollment patterns" (p. viii). Single-institution studies have also illustrated how some students transfer among institutions (e.g., DesJardins, 1999; Kearney, Townsend, & Kearney, 1995; Piland, 1995), attend community colleges during the summer to hasten their baccalaureate program, and concurrently enroll in two-year and four-year colleges (Townsend, 2000).

FC010239

[1] This paper was presented at the annual meeting of the Association for the Study of Higher Education, held in Sacramento, California, in November 2000.

BEST COPY AVAILABLE

Attending two or more colleges while pursuing the baccalaureate occurs for several reasons. One is the growth of community colleges over the past few decades. In 1960 there were over 600 community colleges. By 1998 there were 1600, including branch campuses (Phillippe, 2000, p. 10). Partly because there are so many community college campuses, they enroll a high percentage of first-time college-goers. In 1997 44.9% of students began their higher education at the community college (Phillippe, 2000, p. 42). Other factors contributing to transfer include the mobility of the American populace. Students transfer partly because they or their families move to another residence. Also, there is a wide range of institutional options open to students, particularly in certain geographical areas (Townsend, 2000). Students can choose from public, private non-denominational, private church-affiliated, or proprietary two- or four-year colleges. If they don't like one type of institution, they decide to transfer to another.

These factors combine to create a multiplicity of transfer patterns, including the following:

(1) Transferring from a two-year college to a four-year college, either before or after completing an associate's degree.
(2) Transferring from a two-year college to another two-year college.
(3) Transferring from a four-year college to another four-year college.
(4) Transferring from a four-year college to a two-year college.
(5) Transferring among several two- and four-year colleges.
(6) Matriculating at a four-year college, taking two-year colleges courses during the summer, and transferring these courses into the four-year program.
(7) Enrolling concurrently at both a two-year and a four-year college and transferring the two-year courses into the four-year program.
(8) Taking dual credit courses offered by a community college and, upon graduation from high school, transferring these credits to a four-year college.

History and Nature of State-Level Articulation Agreements

Traditionally, only the first pattern, transferring from the two-year college to the four-year college, has been viewed as the pattern to be encouraged and facilitated. Additionally, the expectation was that two-year students would transfer only after they completed a transfer degree--typically the Associate of Arts (A.A.) but in some states the Associate of Science (A.S.) degree as well. Consequently, throughout much of the 20th century, this transfer was encouraged through the development of institutional articulation agreements specifying conditions under which the A.A. and sometimes the A.S. would transfer to another college. Thus an articulation agreement would specify which courses, programs and degrees the receiving institution will accept from the sending institution. Typically a community college developed an articulation agreement with a four-year college or university to which many of its students transferred.

In the 1940s and 1950s, national attention began to be paid to ways institutions could facilitate transfer between community colleges and four-year institutions. In the 1960s research conducted by Knoell and Medsker emphasized the need for state-level transfer policies (Witt, Wattenbarger, Gollattscheck, & Suppiger, 1994). Transfer *policies* at the state-level usually (but not always) provide the broad rationale and justification for the development of articulation *agreements.* Transfer policies often include general principles (e.g. transfer students should receive comparable treatment as native students) or recommendations to institutions. One such recommendation might be that students who complete all of their general education at the sending institution should be considered to have completed all of their general education requirements at the receiving institution, a recommendation made by the Illinois Board of Higher Education (1997). These broad policies are not the same as articulation agreements, which are essentially the contracts that implement the policies. Articulation agreements generally specify the number of credit hours and the subject matter that will transfer. For example, one would expect to see horizontal, vertical, and reverse articulation *agreements* in states where the state educational agency has transfer *policies* that declare that "two- and four-year institutions are equal partners in the provision of the first two year of undergraduate education."

It has only been in the past three decades that state-level articulation agreements were developed. These agreements include all public colleges in a state system and in some states, also include private colleges within the state. A state may develop and implement a statewide articulation agreement, but may not have written any actual policies that provide the general principles for these articulation agreements.

Noting that the first statewide agreement was developed in Florida in 1971, Kintzer and Wattenbarger (1985) researched which states had official agreements in the mid 1980s. They found that eight states, including Florida, had "formal and legally-based policies" and 22 additional states had "state system policies" (p. 23). Two states, Nevada and South Carolina, had both kinds of policies. The formal, legally-based policies were characterized by "(1) the breadth of general education acceptable for transfer, (2) the emphasis on completion of the associate degree prior to transfer, (3) the legal nature of the agreements, i.e., state law, state education code, or master plan policy, [and] (4) the inclusion of articulation as well as transfer provisions" (p. 29). State system policies focused on transfer between the community college system and the university system within a state and emphasized "the processes of transfer, i.e., formulas for granting credits toward lower division and major requirements" (p. 34). In addition to these state policies, in 21 states institutions or state systems had voluntarily developed articulation agreements. Two of these states, California and New York, also had a state system policy.

Most state-level policies and agreements only addressed upwardly vertical transfer between public institutions. However, Kintzer and Wattenbarger found that Rhode Island included transfer from 4-year colleges to 2-year colleges and between 2-year colleges. Two-year students who transfer to another community college are called "lateral transfers." In the early 1980s these students were "perhaps the largest and least

accommodated group of transfer students" (Kintzer, 1983, p.2). Lack of attention to this group meant that it might be harder to transfer between two-year colleges than from the two-year college to the four-year college (p. 2).

The early state-level agreements also assumed that most students would transfer from a 2-year college to a 4-year college with what has been designated as the transfer degrees, the Associate of Arts (A.A.) and sometimes the Associate of Science (A.S.). Occasionally a state agreement provided for transfer of a general education core of courses, in the event that a two-year student wanted to transfer before completing the A.A. or A.S. degree, but little attention was paid to facilitating transfer of just a few courses (Kintzer, 1983). No attention was paid to the possibility of transferring with an A.A.S. degree. It may be that in the early 1970s when state-level agreements were first being developed, few community college students with an Associate of Applied Science (A.A.S.) degree sought to transfer to a four-year college. The A.A.S. is considered to be a non-transfer degree and is sometimes designated as such in a state, e.g., Tennessee. Currently, however, many students who have an A.A.S. or who have taken non liberal-arts courses seek to transfer to a four-year college (Cohen & Brawer, 1996; Cohen & Ignash, 1994; Striplin, 2000).

Given the likelihood that the majority of today's college students will transfer at least once during their college education and many will transfer two or more times (Adelman, 1999), it is imperative that states have articulation agreements that facilitate this transfer. Additionally, the agreements need to reflect the reality of the diverse transfer patterns noted above and not adhere to reactionary patterns based on traditional views of how students should transfer, i.e., in the upwardly vertical pattern and only with an A.A. or A.S. degree.

Purpose

Therefore, we sought to update Kintzer and Wattenbarger's examination of state-level transfer agreements, and also to determine to what extent current (1999) state-level articulation agreements reflect an awareness of current college attendance pattern.

Methodology

In Spring 1999, we sent a researcher-designed, two-page survey to the executive directors of state higher education and community college agencies. Prior to sending the survey, we asked experts in articulation to analyze and suggest needed changes in the content of the survey, which was then pilot tested with representatives from four state agencies. In the final survey, respondents were asked to indicate whether their state had an articulation agreement. If the answer was yes, respondents were to indicate the year the agreement was established and amended and to check off what was included or covered in the agreement, including the following: (1) *transfer directions* (2- to 4-year, 2-year to 2-year, 4-year to 4-year, 4-year to 2-year), (2) *transfer sectors* (public, private, for profit), and (3) *transfer components* (associate degree only or general education core and/or requirements). Additionally, respondents were to indicate if a state also used a common

course numbering system and if statewide articulation agreements had been developed for specific program majors. After up to three attempts to contact respondents by e-mail and several further attempts by telephone, we achieved an 86% response rate (from representatives of 43 out of 50 states).[2]

Findings

Respondents for 34 (79%) of the 43 states in the study indicated their state had developed a formal, statewide articulation agreement. However, one of these states--Indiana--only required articulation of 30 credit hours in general education courses among the state's public institutions.

The nine states without a statewide agreement were Delaware, Maine, Michigan, New York (both CUNY and SUNY systems), Pennsylvania, South Carolina, Tennessee, Texas, and Wisconsin. Four of these states (Delaware, Maine[3], Michigan, Tennessee) had voluntary inter-institutional or system agreements in the mid 1980s (Kintzer & Wattenbarger, 1985) and have continued this approach. At the time of Kintzer and Wattenbarger's (1985) study, both South Carolina and Texas had a formal, legally-based transfer policy, but in our 1999 study, they had still not implemented these formal polices in the form of statewide articulation agreements. More specifically, the Texas Higher Education Coordinating Board (THECB) has developed clear policy statements that ask institutions, for example, to consider two- and four-year institutions as equals in providing freshmen and sophomore year courses (Texas Higher Education Coordinating Board, http://www.thecb.state.tx.us/rules/rulemain.htm.). But THECB still leaves the development of the actual articulation agreements up to individual institutions to work out. While the Texas Modified Core of general academic courses noted by Kintzer and Wattenbarger (p. 26) held the promise that the first two years of a baccalaureate program at the state's community colleges would be 'freely transferable' and would receive full credit toward bachelor degree requirements, this promise was not realized as it could have been. Kintzer and Wattenbarger were prescient when they wrote, ". . . the [Texas] Coordinating Board must watch for different interpretation of the lower division placement of community college courses by university departments" (p. 27). This level of local control by the universities over accepting transfer credits remains in effect today.

South Carolina was also listed as having a state system policy in the mid-1980s. This policy concerned the transfer to the university of academic courses offered at the state's technical institutions. New York, Pennsylvania, and Wisconsin also had state system policies in the mid 1980s (Kintzer & Wattenbarger, 1985) but did not report having state-level articulation agreements as of 1999.

Twenty-seven of the states with statewide articulation agreements had either developed these agreements or amended existing ones since 1985, the year that Kintzer and Wattenbarger reported their results. For 15 states, their agreements had only been

---

[2] Non-responding states were Alaska, Minnesota, Nebraska, New Hampshire, New Jersey, North Carolina, and Vermont.

[3] Maine does not have a community college system.

established or improved within the five years preceding the beginning of this study in 1999. (See Table 1).

Regarding *transfer directions,* as might be expected, the traditional view of transfer as an upwardly vertical movement from the two-year to the four-year college dominated the agreements. All 33 agreements (excluding Indiana) facilitated this transfer, just as did the 30 policies that Kintzer and Wattenbarger (1985) identified. While in ten states (30%), this was the only direction that was included, eighteen (53%) states included all four transfer directions. One additional state, Rhode Island, which has one public community college with three different campus locations and two public four-year institutions, included all transfer directions that applied (e.g. reverse transfer between the two- and four-year institutions and horizontal transfer between the four-year colleges). Twenty-one (64%) states addressed articulation between two-year colleges. In comparison, only one state had done so by the mid 1980s (Kintzer & Wattenbarger, 1985). Twenty-two (67 %) included transfer between four-year colleges, and 19 (57%) included reverse transfers, those who transfer from four-year colleges to community colleges (See Table 2). By contrast, only Rhode Island had included reverse transfers and no states addressed transfer between four-year colleges, in the Kintzer and Wattenbarger study.

Transfer sectors covered in the current agreements were primarily public ones. All 34 states included public institutions in their statewide articulation agreements, with 27 of these states reporting that 100% compliance among public institutions and one more reporting 98% compliance. In seven states (21%), both public and private institutions were covered in the articulation agreement: California, Connecticut, Florida, Idaho, Illinois, North Dakota, Washington. In four (12%) of these seven states, all three kinds of institutions (public, private, and for-profit) were included. A fifth state, Utah, also reported some voluntary compliance among the state's major for-profit institutions. Three of these states (California, Florida, and Illinois) enroll a significant percentage of the nation's community college students. In Fall 1996 California enrolled over 20%, Florida almost 6%, and Illinois over 6% of all community college students (Phillippe, 2000). California reported that 75% of the students in California's regionally accredited private institutions were covered by the state's articulation agreement. Similarly, Illinois reported that 60 to 65% of undergraduate students in private colleges were covered, Idaho reported 50%, and North Dakota reported 60% (See Table 2). Kintzer and Wattenbarger (1985) did not explicitly address which kinds of institutions were covered in state-level agreements existing in the mid 1980s. However, a review of the policies described indicate that only public institutions were included.

Regarding *transfer components*, the majority (23 or 70%) of states had designated one or more associate degrees as a degree that would automatically transfer to all four-year public institutions within the states. Respondents in six states indicated this degree was the A.A. degree only (Florida, Hawaii, Iowa, Missouri, Oregon, Washington). Other states (10 or 30%) designated additional degrees, usually the A.S. Kintzer and Wattenbarger (1985) did not specify what kind of associate degrees were included in state-level polices of the mid 1980s. They did, however, address the transferability of vocational courses and programs, but in terms of courses transferring from vocational-

technical schools to community colleges. Only one state, Maryland, had designated the A.A.S. as transferable as part of the B.S. in Technology articulated program (See Table 3).

State articulation agreements addressing the general education transfer component provided both general and more specific direction to institutions regarding what should transfer. Twenty-two states indicated statewide requirements for general education, which means the state stipulated either the number of credit hours without suggesting subjects or stipulated that a student needed a specified number of credits in some suggested subjects. For example, Florida specifies that no more than 36 credits hours spread across math, English, social sciences, natural science and humanities be included, but there is no mandate on distribution hours. Twenty-four states (71%), including many that also provided some broad direction about general education, had developed a more prescriptive common core of general education for all state schools. In almost all of these states, the general education core followed the distribution model, whereby students had to complete a certain number of credits in specified areas distributed among the arts and sciences (See Table 3).

Regarding other components, 13 states (38%) have a common course numbering or similar system that allows students to transfer individual courses throughout the system. Two additional states, Virginia and Wisconsin, had a common course numbering system for only the community college sector. Only seven states (21%) have agreements specifying statewide requirements for program majors: Arizona, Florida, Georgia, Illinois, Maryland (only for the B.S. in Technology), Mississippi and Ohio (See Table 3).

Since Kintzer and Wattenbarger (1985) did not give details for each state's policy, comparisons cannot be clearly made. However, the state policies existing in the mid 1980s frequently addressed a common core of general education courses for all colleges within a state system.

Conclusions and Policy Implications

The extent of student transfer has increased greatly in the past couple decades. State-level articulation agreements in the mid-1980s focused primarily on one transfer pattern and just within public institutions: movement from the two-year college to the four-year college. Currently, the results are mixed about the extent to which states have articulation agreements that facilitate today's varied student transfer patterns. Slightly more than half the states in the study have agreements that implicitly acknowledge students' "transfer swirl" or movement (de los Santos & Wright, 1989) between and within sectors. Only a handful of states seemingly acknowledge that this swirl occurs among state, private, and for profit institutions. Although there is still room for improvement, the fact that 27 states have either developed or amended existing articulation agreements since the time of Kintzer and Wattenbarger's study in 1985 attests not only to real progress, but also to the importance states are placing upon transfer and articulation.

Continuing on a positive note, even when the agreements only address the traditional upwardly vertical transfer pattern, they facilitate this transfer not only for students with

the traditional transfer degree of the A.A. or the A.S., but also for students who have not completed an associate degree. The agreements accommodate this pattern by facilitating transfer of general education requirements or a general education core. Further facilitation of what could be viewed as "early transfer" is provided through use of common course numbering and articulation of specific majors, although far fewer states have incorporated these approaches. Only one state, Maryland, is cutting edge in its designation of the A.A.S. degree as an acceptable transfer degree.

It is important that statewide articulation agreements facilitate inter-institutional transfers within the state. From the student's perspective and from the sending institution's perspective, the ideal is to transfer from one institution to the next with no loss of course credits. From the receiving college's perspective, the ideal is to accept for transfer only those courses that are genuinely equivalent to courses at the receiving institution. From the state's perspective, transfer without loss of credits represents an efficient use of state resources: students will not need to be subsidized to receive additional credits.

If states are to craft transfer policies and articulation agreements that reflect real student transfer behavior today, three pieces of advice can be found in the results of this study:

1) Agreements need to reflect swirling, not just upward, vertical, "junior-to-senior" institution transfer patterns.
2) Agreements need to reflect the fact that two-thirds of students transfer before completing the associate's degree. Therefore, articulation agreements must be crafted to address "chunks" of programs (e.g. general education, and program major requirements), as well as course-by-course articulation.
3) Articulation agreements need to reflect student attendance in both public and private colleges and universities. Private non-profit and private-proprietary institutions are major providers of undergraduate education in quite a few states. They need to be included in statewide agreements.

Since so many states now have existing statewide articulation agreements, it is entirely possible for educational systems to get locked into statewide panels of faculty, administrators, and state agency staff devoted to making minor improvements on existing agreements without realizing that these agreements may be based upon ideas that are fundamentally flawed—such as agreements that do not include reverse transfer. The results of this study challenges states to look at assumptions that underlie their existing articulation agreements, and to do what is necessary to align statewide articulation agreements with the reality of student transfer patterns.

References

Adelman, C. (1999). *Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment*. Jessup, MD: Education Publications Center, U.S. Department of Education.

Berkner, L. Horn, L. & Clune, M. (March 2000). *Descriptive summary of 1995-96 beginning postsecondary students: Three years later, with an essay on students who started at less-than-4-year institutions*. Washington, DC: National Center for Education Statistics.

Cohen, A., & Brawer, F. (1996). The American community college, 3rd ed. San Francisco: Jossey-Bass.

Cohen, A., & Ignash, J. (Summer 1994). An overview of the total credit curriculum. In A. M. Cohen (Ed.), *Relating curriculum and transfer* (pp. 13-29). New Directions for Community Colleges, No. 86. San Francisco: Jossey-Bass.

de los Santos, G., & Wright, I. (1989). Community college and university student transfers. *Educational Record, 79* (3/4), 82-84.

DesJardins. S. L. (Spring 1999). Tracking institutional leavers: An application. *AIR Professional File*, No. 71.

Illinois Board of Higher Education. (1997, May). Board of Higher Education policies on undergraduate education. Transfer and Articulation. Adopted September 1990. Amended September 1994 and May 1997. Springfield, Illinois: Author.

Kearney, G. W., Townsend, B. K., & Kearney, T. (1995). Multiple-transfer students in a public urban university: Background characteristics and interinstitutional movements, *Research in Higher Education, 36* (3), 323-344.

Kintzer, F. (1983). *The multidimensional problem of articulation and transfer*. ERIC Digest 288577. Los Angeles, CA: ERIC Clearinghouse for Junior Colleges.

Kintzer, F. C., & Wattenbarger, J. L. (1985). *The articulation/transfer phenomenon: Patterns and directions*. Washington, DC: American Association of Junior and Community Colleges.

McCromick, C., & Carroll, C.D. (1997). (Report No. NCES 97-266). Washington, DC: National Center for Education Statistics.

Phillippe, K. A. (2000). *National profile of community colleges: Trends & statistics*, 3rd ed. Washington, DC: Community College Press, American Association of Community Colleges.

Piland, W. (1995). Community college transfer students who earn bachelors' degrees. *Community College Review*, 23 (3), 35-44.

Porter, S. R. (1999). *Including transfer-out behavior in retention models: Using the NSLC enrollment search data.* Paper presented at North East Association of Institutional Research annual conference, Newport, Rhode Island.

Southern Educational Foundation. (1995). Redeeming the American promise: Report of the panel on educational opportunity and postsecondary desegregation. Atlanta, GA: Author.

Striplin, J. C. (2000). An examination of non-liberal arts course transferability in California. *Community College Review, 28* (1), 67-78.

Texas Higher Education Coordinating Board. Chapter 5 Program Development, Subchapter S Core Curriculum Transfer and Field of Study Curricula. Austin: The Texas Higher Education Coordinating Board. [On-line.] Available: http://www.thecb.state.tx.us/rules/rulemain.htm.

Townsend, B. (1999*). Understanding the impact of reverse transfers upon community colleges.* New Directions for Community Colleges, No. 106. San Francisco: Jossey-Bass.

Townsend, B. (Summer 2000). Transfer students' institutional attendance patterns: A case study. *College and University*, 21-24.

Witt, A.A., Wattenbarger, J. L., Gollattscheck, J. F., & Suppiger, J. E. (1994). *America's community colleges: The first century.* Washington, DC: American Association of Community Colleges.

Table 1.

States with State-Level Articulation Agreements (N=34)

State	Kintzer & Wattenbarger Study (1985)[1]	Current Study (1999)	Year(s) Developed and Amended[2]
Alabama	No	Yes	1994; 1998; 1999
Alaska	Yes	---	---
Arizona	Yes	Yes	1996; 1999
Arkansas	No	Yes	1989
California	Yes	Yes	1993
Colorado	No	Yes	1985; 1986; 1988
Connecticut	No	Yes	1997-1998
Delaware	No	Nc	---
Florida	Yes	Yes	1975
Georgia	Yes	Yes	1985; 1998
Hawaii	Yes	Yes	1989; 1998
Idaho	No	Yes	1986-7
Illinois	Yes	Yes	1990; 1992; 1994
Indiana	No	Yes[3]	1992
Iowa	No	Yes	Early 1970s
Kansas	Yes	Yes	1989
Kentucky	Yes	Yes	1993-97
Louisiana	No	Yes	1996; updated yearly
Maine	No	No	---
Maryland	Yes	Yes	1996; 1998
Massachusetts	Yes	Yes	1984; 1990; 1996; 1997
Michigan	No	No	---
Minnesota	Yes	---	---
Mississippi	Yes	Yes	1989
Missouri	Yes	Yes	1987; 1998
Montana	No	Yes	1971
Nebraska	Yes	---	---
Nevada	Yes	Yes	1992
New Hampshire	No	---	---

[1] A formal and legally based policy or a state system policy

[2] The first date listed is the date given by respondent to the question, "When was the agreement developed?" If subsequent dates are listed, they indicate the dates the respondents reported that the existing agreements were amended.

[3] Indiana is given credit for mandating 30 credit hours of fully transferable general education among public institutions.

Table 1 (cont'd)

States with State-Level Articulation Agreements

State	Kintzer & Wattenbarger Study (1985)[1]	Current Study (1999)	Year(s) Developed and Amended[2]
New Jersey	Yes	---	---
New Mexico	No	Yes	1995
New York	No	No	---
North Carolina	No	---	---
North Dakota	Yes	Yes	1990
Ohio	No	Yes	1990
Oklahoma	Yes	Yes	1995
Oregon	No	Yes	1988
Pennsylvania	Yes	No	---
Rhode Island	Yes	Yes	1979
South Carolina	Yes	No	---
South Dakota	No	Yes	1998
Tennessee	No	No	---
Texas	Yes	No	---
Utah	Yes	Yes	Early 1980s
Vermont	No	---	---
Virginia	Yes	Yes	1990; 1993
Washington	Yes	Yes	1985
West Virginia	Yes	Yes	1979; 1994
Wisconsin	Yes	No	---
Wyoming	No	Yes	1985

[1] A formal and legally based policy or a state system policy

[2] The first date listed is the date given by respondent to the question, "When was the agreement developed?" If subsequent dates are listed, they indicate the dates the respondents reported that the existing agreements were amended.

Table 2.

Transfer Directions and Institutions Covered in State-level Agreements (N= 34)

State	2>4	4>2	2>2	4>4	Publics	Privates	Proprietary
Alabama	Yes	Yes	Yes	Yes	Yes	No	No
Arizona	Yes	No	No	No	Yes	---	---
Arkansas	Yes	Yes	Yes	Yes	Yes	No	No
California	Yes	No	Yes	Yes	Yes	Yes	Yes
Colorado	Yes	No	No	No	Yes	No	No
Connecticut	Yes	Yes	Yes	Yes	Yes	Yes	No
Florida	Yes	No	Yes	Yes	Yes	Yes	Yes
Georgia	Yes	Yes	Yes	Yes	Yes	No	No
Hawaii	Yes	Yes	Yes	Yes	Yes	No	No
Idaho	Yes	Yes	Yes	Yes	Yes	Yes	No
Illinois	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Indiana	---	---	---	---	Yes	---	---
Iowa	Yes	No	No	No	Yes	---	---
Kansas	Yes	No	No	No	Yes	No	No
Kentucky	Yes	Yes	Yes	Yes	Yes	No	No
Louisiana	Yes	Yes	Yes	Yes	Yes	No	No
Maryland	Yes	Yes	Yes	Yes	Yes	No	No
Massachusetts	Yes	No	No	No	Yes	No	No
Mississippi	Yes	Yes	Yes	No	Yes	No	No
Missouri	Yes	Yes	Yes	Yes	Yes	No	No
Montana	Yes	Yes	Yes	Yes	Yes	No	No
Nevada	Yes	No	No	No	Yes	No	No
New Mexico	Yes	Yes	Yes	Yes	Yes	No	No
North Dakota	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ohio	Yes	Yes	Yes	Yes	Yes	No	No
Oklahoma	Yes	Yes	Yes	Yes	Yes	No	No
Oregon	Yes	No	No	No	Yes	No	No
Rhode Island	Yes	No	No	Yes	Yes	No	No
South Dakota	Yes	No	No	Yes	Yes	---	---
Utah	Yes	Yes	Yes	Yes	Yes	No	No
Virginia	Yes	No	No	No	Yes	No	No
Washington	Yes	No	No	No	Yes	Yes	No
West Virginia	Yes	Yes	Yes	Yes	Yes	No	No
Wyoming	Yes	No	No	No	Yes	No	No

Table 3.

Non-Degree Components in State-level Articulation Agreements (N= 34)

State	General Eucation Requirements	General Education Core	Program Majors	Common Course Numbering
Alabama	Yes	Yes	No	No
Arizona	Yes	Yes	Yes	No
Arkansas	Yes	Yes	No	No
California	Yes	Yes	No	Yes
Colorado	Yes	Yes	No	Yes
Connecticut	Yes	Yes	No	No
Florida	Yes	No	Yes	Yes
Georgia	Yes	Yes	Yes	Yes
Hawaii	No	No	No	No
Idaho	Yes	Yes	No	Yes
Illinois	No	Yes	Yes	Yes
Indiana	No	Yes[1]	No	No
Iowa	No	No	No	No
Kansas	Yes	Yes	No	No
Kentucky	No	Yes	No	Yes
Louisiana	Yes	Yes	No	Yes
Maryland	Yes	Yes	Yes	No
Massachusetts	No	Yes	No	No
Mississippi	No	No	Yes	No
Missouri	Yes	Yes	No	No
Montana	Yes	Yes	No	No
Nevada	Yes	No	No	No
New Mexico	No	Yes	No	No
North Dakota	Yes	Yes	No	Yes
Ohio	Yes	Yes	Yes	No
Oklahoma	Yes	Yes	No	Yes
Oregon	Yes	No	No	No
Rhode Island	No	No	No	No
South Dakota	Yes	No	No	Yes
Utah	Yes	Yes	No	Yes
Virginia	No	No	No	No
Washington	Yes	Yes	No	No
West Virginia	No	Yes	No	No
Wyoming	No	No	No	Yes

[1] Indiana has mandated 30 credit hours of fully transferable general education among public institutions.